

Cut-Your-Own Christmas Trees Plentiful this Holiday Season

By Jim Horst, President of the New Hampshire-Vermont Christmas Tree Association

It has been said that money does not grow on trees, but that phrase may not capture the whole picture, especially if you are one of the 200 or so Vermonters that bring to market Christmas trees, wreaths, garlands, and other decorator items each year. Many trees are sold to the wholesale market for ultimate resale throughout the region. Others are sold directly to the consumer, who enjoy the process of visiting the farm and taking part in the “cut your own” experience.

Within the New Hampshire-Vermont Christmas Tree Association, the “cut your own”



market is the most rapidly growing segment of an industry which annually produces more than 30 million trees nationwide. While Vermont production is not large in comparison to the major

producing states of North Carolina, Pennsylvania, Michigan, Oregon and Washington, the soil and climate here are ideal for producing a quality tree. Balsam fir and Fraser fir are our state’s primary species,

Governor Phil Scott preparing to choose and cut his tree last season.

but other exotic species are grown here as well. The large population within driving distance of a Vermont farm often allows for direct sale to the consumer through pick-your-own and cut-your-own operations. Many farms truly turn the selection of a tree into an experience with gift shops, hot chocolate or cider, wagon rides or even visits from Santa. Some allow for pre-season visits to the farms, where customers can select and tag a tree for ultimate cutting later in the year.

All farmers are in a partnership of sorts, with Christmas tree farmers being no different, with Mother Nature. 2020 was a difficult year,

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AGRiVIEW

Vermont Agency of
Agriculture, Food & Markets

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THE VIEW FROM 116 STATE STREET

It's no secret Vermont has some of the finest food in the world. Vermont may not be the biggest state, but we can brag about our quality being the best in many ways.

It all begins on the farm and in the field. The care of our animals and land leads to quality on the shelf. The proof can be found in a recent contest by the Good Food Foundation based in San Francisco. Twenty-five specialty food products from 15 Vermont companies were recently named by the Good Food Foundation as finalists for a 2022 Good Food Award. It's an incredible achievement to be named a finalist with thousands competing for this honor. Selected from nearly 2,000 entries to the 12th annual Good Food Awards, these Vermont products will compete against 351 entries in 17 categories, hailing

from 42 states having passed vetting for category-specific sustainability standards. It's quite a line up. The 15 Vermont businesses in the running for the 12th Good Food Award craft products in the categories of Spirits, Cider, Charcuterie, Honey, Confections, Elixirs, Grains, Pantry, Pickles and Preserves.

This wide range of Vermont companies making high quality products brings Vermont's great food to the world. These companies represent Vermont's wonderful food and beverage crafters who are focused on quality, creativity, and commitment to their community.

The full list of Vermont's 15 finalists and 25 products and category include:

- **Agricola Meats**, Salame Classico - Charcuterie
- **Cellars at Jasper Hill Farm**, Highlander - Cheese
- **Vermont Creamery**, Bijou - Cheese
- **Vermont Creamery**, Cremont - Cheese
- **von Trapp Farmstead**, Mad River Blue - Cheese
- **Champlain Orchards**, Ettersburg - Cider
- **Champlain Orchards**, Honeycrisp - Cider
- **Eden Specialty Ciders**, Northern Spy Barrel-Aged Ice Cider - Cider
- **Eden Specialty Ciders**, Windfall Orchard Farmhouse Cider - Cider
- **Rabble-Rouser Chocolate & Craft Co.**, Milk Chocolate Peanut Butter Bar - Confections
- **Blake Hill Preserves**, Basil & Blueberry Shrub - Elixirs
- **Blake Hill Preserves**, Spicy Jalapeno Shrub - Elixirs
- **Blake Hill Preserves**, Wild Mint Shrub - Elixirs

- **Blake Hill Preserves**, Roasted Garlic Savory Jam - Pantry
- **Blake Hill Preserves**, Raspberry with Wild Bergamot Flower Jam - Preserves
- **Runamok Maple**, Orange Maple Bitters - Elixirs



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This Month's Recipe

Butternut Squash Pasta

Take your pasta to the next level with a nutrient-rich butternut squash sauce your whole family will enjoy. Crisp up your favorite vegetables to add on top for a complete meal that you will feel good about serving, even to picky eaters. Thanks to New England Dairy for sharing this recipe.

Ingredients

1 box of pasta of your choice. A thicker pasta will hold the sauce easily!

Butternut squash pasta sauce:

4 cups chopped butternut squash
1 medium-sized yellow onion
Chopped scallions
1 tbsp olive oil
1 cup whole milk
Pinch of salt
1/2 tsp garlic powder

To garnish:

Chopped broccoli
Pepper
Parmesan on top

Instructions

- Bring a large pot of water to a boil, and add the chopped butternut squash. Cook for about 8-10 minutes until soft.

Check if the squash is soft with a fork. Once the squash is cooked, place it to the side to cool.

- In the meantime, add the olive oil to a pan. Once the oil is warm, add the chopped onion and chopped scallions to the pan. Let them crisp for about 30 seconds on each side and then remove them from the heat and place them on the side.
- In the same boiling water you used for the butternut squash, cook the pasta until soft according to the package directions and continue stirring. Reserve 1 cup of the pasta cooking water before draining.
- Once cool, add the squash, chopped onions, and scallions to a blender with 1 cup of milk and



mix. While this is happening, add chopped broccoli to a pan and crisp them up to top your pasta with.

- If necessary, add additional milk and 1 cup of reserved water to make the pasta sauce smooth. Once it's to your liking stop blending.
- Add the cooked pasta to a bowl along with the butternut squash sauce and combine.
- Top off with the crisped broccoli or vegetable of choice, parmesan cheese, pepper seasoning, and serve!

Beware of Deceptive Business Filing Service

by Charity R. Clark, Attorney General's Office

Attorney General T.J. Donovan and Secretary of State Jim Condos are warning Vermont businesses that a Florida-based company, Centurion Filing Services, LLC, calling itself VT Certificate Service, is mailing businesses a request for payment for a “certificate of good standing.” The mailing—which looks like a bill requesting a “fee” of \$87.50—has the recipient’s information pre-printed on the form and creates a false sense of urgency by using the terms “Notice Date” and “Please Respond By.” It also deceptively suggests officiality by referring to the “State of Vermont” and the “Secretary of State” when it is not affiliated with any State agency. Last week, the Attorney General’s Office sent a cease-and-desist letter to the company demanding it stop misleading Vermont businesses about the so-called “service.”

“Bogus solicitations by out-of-state actors negatively impact Vermont small businesses,” said Attorney General Donovan. “It’s misleading, it’s unnecessary, and it will not be tolerated. I

want to thank the Secretary of State’s Office for flagging this problem.”

A certificate of good standing or status confirms that a business is compliant with all legal requirements to retain sole rights to its business name, and the authority to conduct business under its business name within Vermont. Certified copies of documents are not a requirement and are rarely needed in day-to-day transactions, but may occasionally be useful to authenticate a business registration, show good standing, or to apply for a loan. Vermont businesses that have registered with the Secretary of State’s Office can generate certificates of good standing by using the Secretary of State’s website and paying a \$25 fee.

Vermonters who paid VT Certificate Service for filing “services” may file a complaint online with the Attorney General’s Consumer Assistance Program or by calling 800-649-2424. For information about how to access business filings or to request certified copies of forms, contact the Secretary of State at <https://sos.vermont.gov/>

Changes to the Vermont Farm Show

Farm Show Returns in 2022 Bringing New Voices and Networking Opportunities

Leslie Pelch and the Vermont Farm Show Board of Trustees

Recently, the Vermont Farm Show Board of Trustees announced the return of the Vermont Farm Show in 2022. The annual agricultural event will return to the Champlain Valley Expo in Essex Junction following the cancellation of the show in 2021 due to the impacts of the pandemic.

The 2022 Vermont Farm Show, “Vermont Agriculture – From Farm to Consumer: Showcasing Vermont’s Agricultural Diversity and Providing an Inspiration for the Future,” is expected to bring more than 5,000 people from all over Vermont, New

York, New Hampshire, Canada, and beyond, to experience Vermont’s long-time premier winter agricultural event!

Highlights of the 2022 Vermont Farm Show include:

- Over 150 Agriculture and Food Related Exhibitors
- Free Food Samples
- Product Contests – see the best of:
 - Forage & Grain
 - Maple
 - Christmas Trees & Wreaths
 - Fiber & Wool
 - Home Products
 - Honey
- Informational, Educational, and Association Meetings
- Exhibitor and Sponsor Registration is open now, so save your spot before they fill up!
- **Exhibitor and Sponsor Brochure**
Contact Karen Forbes at karen@delaneymeetingevent.com or 802-865-5202
- **Registration to Reserve a Booth or Sponsor the Show**
Contact Karissa Hasser at kj@expointel.com or 530-520-6933

New this year! The Consumer Night event traditionally held on Wednesday evening has been replaced with local food vendor booths set-up throughout the show floor during all three days of the event. Bring your appetite for local Vermont products this year!

Tickets will be sold online and

at the door. This is a new development working to support the 2+2 Scholarship Program which provides grants to young Vermonters who wish to pursue a career in the dairy industry while also reflecting the rising costs of the show. You can save on admission by purchasing tickets in advance online before January 31, or purchase at the door during the show. Online price is \$4; at the door is \$5.

The show will be open to the public on Tuesday, February 1, 9 AM – 5 PM; Wednesday, February 2, 8:30 AM – 5:30 PM; and Thursday, February 3, 9 AM – 4 PM. Parking for this event is free! Look for more on the 2022 Vermont Farm Show

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Vermont Develops Plan to Support the Farm and Ranch Stress Assistance Network

By Scott Waterman, VT
Agency of Agriculture, Food
and Markets



The Vermont Agency of Agriculture, Food and Markets (Agency), the Vermont Agency of Human Services (AHS) and the Farm First Program are proud to announce the award of an USDA Farm and Ranch Stress Assistance Network – State Departments of Agriculture grant. The Agencies will collaborate with Farm First to provide expanded stress and mental health services to Vermont Farmers. The program will build on programs of the USDA Farm and Ranch Stress Assistance Network, Northeast of which Farm First is a partner.

Vermont Agriculture Secretary Anson Tebbetts commented; “The health and wellness of our farmers is critical, and this grant will grow the state’s ability to connect with and assist this vital group of Vermonters. It’s critical that we increase our outreach and assistance to farmers and those that interact with them to address stress and mental health issues for farm owners and employees.”

“Farm First welcomes this opportunity to expand our work through this partnership with the Vermont Agency of Agriculture, Food and Markets and the Vermont Agency of Human Services,” said Karen Crowley, Farm First Program Manager. “We’re excited to build our

capacity to provide needed supports to the agricultural community through innovative strategies such as peer support services.”

The expanded service will include:

- An outreach program to all farms on the issues of stress, the impact to farming and the services available
- A series of trainings for agricultural service providers to assist them to identify and communicate with farmers experiencing stress and connecting these farmers with the services of the Farm First program. Agency of Agriculture will have an embedded employee to assist staff with training and connection of farmers to Farm First services
- Farm First will expand their coordinated service to farmers, sending out a farm coordinator and trained counselors to assess the situation, provide resources and expand follow up services to 12 visits
- Farm First will develop a peer support network of farmers and connect farmers with peer supports through interactive mapping on the website
- Farm First will develop and coordinate behavioral screenings and follow-

up intervention sessions directly with farmers

- Farm First will conduct a needs assessment and analysis of available services for the farmworker community and provide Farm First mental health supports. “Vermont farmers and farmhands have difficult jobs even in the best of times,” said Mike Smith, Secretary of the Agency of Human Services. “So, when family, health, or business problems crop up — as they inevitably do for all of us — our farmers need access to supports so that they aren’t left to deal with these challenges in isolation.”

“It would be hard to overstate how important this program is for Vermont farmers,” said Emily Hawes, Commissioner of the Department of Mental

Health. “We tend to tell ourselves that stress is no big deal. But when stress builds and isn’t dealt with, it can lead to serious mental health problems and other illness. The expansion of this grant will help more Vermont farmers cope with the stresses they face and build their health.”

This program will provide services for Vermont and build upon the services that have been provided by Farm First to farmers. The Agency and Farm First will begin the work with farmers in November 2021. For more information, please contact Diane Bothfeld, Vermont Agency of Agriculture, Food and Markets by email Diane.Bothfeld@vermont.gov or Karen Crowley, Farm First Program Manager, by email karenc@farmfirst.org or by phone 802-277-5316.

116 State Street

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- **Runamok Maple**, Smoked Old Fashioned Cocktail Syrup - Elixirs
- **Moon and Stars Arepas**, Moon and Stars Arepas - Grains
- **Republic of Vermont**, Honeycomb - Honey
- **Republic of Vermont**, Cultured Maple Syrup - Pantry
- **The Topsy Pickle**, Hart Bread N Butter - Pickles
- **The Topsy Pickle**, Maple Breakfast Stout Pickles - Pickles
- **Pin Up Pickles**, Pickled Strawberries - Pickles
- **Pin Up Pickles**, Bread & Butters - Pickles
- **V Smiley Preserves**, Plum Anise Hyssop Lemon Verbena Jam - Preserves
- **Appalachian Gap Distillery**, Drumlin Champlain Valley Straight Rye Whiskey - Spirits

Winners in each category will be announced January 14, 2022, in San Francisco, California at the Good Food Awards Ceremony.

With the holiday season upon us, you can support these companies and many other Vermont companies by finding them at your favorite retail store or you

can order many on-line. Many food companies are prepared to send gifts through the mail via E-Commerce. It’s a treat to get a piece of Vermont in the mailbox.

Thanks for buying local and supporting all our food and beverage companies that are committed to making



Vermont a better place to live, play and raise a family. Best of luck to all.

— Anson Tebbetts,
Secretary, Agency of Agriculture, Food & Markets

Dairy Food Safety and Certification Grant Open Now

by Ollie Cultrara, VT
Agency of Agriculture, Food & Markets

[safety-certification-grant](#) or
contact Kathryn.Donovan@vermont.gov

The Northeast Dairy Business Innovation Center (NE-DBIC) is now accepting applications for the Dairy Food Safety & Certification Grant Program until February 3, 2022. This program will provide funding to help dairy producers and processors increase production safety standards and meet audit requirements to sell into certain markets. Eligible projects may include technical assistance, audits, plan writing, and infrastructure upgrades.

This application is open to dairy producers, processors, and producer associations based in the Northeast. Grants will range from \$10,000 - \$40,000 with a 25% (cash or in-kind) match commitment required. For more information, visit agriculture.vermont.gov/dbic/activities/dairy-food-

SIAL

By Emily Lopuski,
VT Agency of Agriculture,
Food & Markets

Cheesemakers from across the U.S. will soon come together in Montreal to represent the high-quality cheese products from our region at SIAL Canada on April 20th through the 22nd. SIAL is Canada's only food show dedicated to the retail and foodservice sectors where a complete range of food products are showcased under one roof, allowing buyers to discover the industry's latest trends and innovations while increasing domestic and international audience for the exhibitors.

SIAL is an entryway to the U.S and international markets with more than 1,200 national and international exhibitors



NE-DBIC staff participate in sensory training led by Roy Desrochers, UVM Extension Sensory Chemist.

from 50 countries hosting over 25,000 buyers from Canada, the United States, and 60 other countries. In 2022, the Dairy Business Innovation Center will host a turn-key Cheese Pavilion where each of 6 businesses will have a 5x10 foot space, front counter, cabinet, and a rear display counter with a backlit logo within the pavilion. We will do the heavy lifting so that you can focus on what you do best!

Whether you are just beginning to export your product, or are experienced in the field, SIAL is guaranteed to elevate your experience due to the countless business opportunities present at the show. If you are interested in participating or would like more information, visit <https://agriculture.vermont.gov/dbic/activities/2022-sial-canada-cheese-pavilion> or contact Emily.Lopuski@vermont.gov.

Artisan Cheese Research Update

By Roy Desrochers, Heather Darby, and Sara Ziegler
– University of Vermont Extension

“Would you please pass the cheese?” Sure! But which one? Do you like the sweet buttery version or the stinky strong one? It’s a critical question to answer for local farmers and cheese producers. Simply put, consumers purchase cheese that tastes good to them, but knowing which flavors and aromas consumers prefer is just the beginning. Farmers and cheese producers must also know how to produce cheeses with these desirable characteristics. What factors affect the flavor of cheese, and in what way? Is it the quality of the milk used, the feed that the cows eat, or

perhaps the way the cheese is made? The Northeast Dairy Business Innovation Center (NE-DBIC) hosted by the Vermont Agency of Agriculture, Food & Markets has teamed up with the University of Vermont Extension to begin to answer such questions.

Earlier this year, UVM Extension kicked off a NE-DBIC funded project to use a sensory directed product development approach to connect the dots between the farm, cheese production, and final cheese products that meet consumer preferences.

The first task was to train a team of UVM staff in an objective, descriptive tasting method called Flavor Profile Method. The training was led by Roy Desrochers, a global sensory expert with UVM Extension. This method is the first descriptive sensory

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Cheesemaking at the Plymouth Artisan Cheese Co., Coolidge Historic Site.

Artisan Cheese Research Update

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method in the world and has successfully been used to benchmark product flavor, understand consumer preferences, and identify key variables responsible for the sensory quality of food products in the marketplace. This method can be applied to any food product or beverage from ice cream to beer.

Next, the trained sensory panel evaluated a wide range of cheeses purchased in the local market, as well as cheeses provided by two farms who are participating in the study, Jasper Hill Farm (Greensboro, VT) and Spring Brook Farm (Reading, VT). The result was the

generation of categories of objective descriptive words to effectively describe the aroma and flavor of cheese. These categories were then used to develop an objective aroma and flavor scoresheet that the sensory panel will use to assess samples later this year and next year.

Currently, UVM Extension is working with Jasper Hill Farm and Spring Brook Farm to supply the core cheeses for the study. The core cheeses will be Alpine style and includes Harbison, Whitney, Alpha Tolman, Reading, Ashbrook, and Tarentaise. Since these types of cheese require different maturation times to reach peak sensory quality, from 70 days up to 10 months, their production dates will be staggered from

Oct. 2021 into January of 2022.

Once the artisan cheeses have matured, the first set in March 2022 and another set in August 2022, they will undergo a series of tests including:

- Descriptive sensory analysis by the UVM Extension Sensory Panel to objectively benchmark aroma, flavor, and texture
- Innovative consumer testing to establish customer overall liking and flavors of interest
- Beneficial fat analysis by UVM to understand nutritional value
- Sensory Directed Chemical Analysis (SDCA) by Tufts University to identify aroma and flavor compounds of interest
- Microbial analysis by Tufts University to link aroma and flavor characteristics to the organisms that produce them

By the conclusion of the project, we will be able link the data together to gain an in-depth understanding of the sensory quality of

artisan cheese and which management and production factors most heavily influence it. So, the next time you ask, "Would you please pass the cheese?", we

will know exactly which one to pass, and everyone in the artisan cheese value chain, from farmers and cheese producers to retailers and consumers, will benefit.

For Agricultural Events and Resources Visit:

- The VT Agency of Agriculture Events Calendar: <https://agriculture.vermont.gov/calendar>
- UVM Extension Events Calendars: https://www.uvm.edu/extension/extension_event_calendars
- Vermont Farm to Plate Events Calendar: <https://www.vtfarmtoplate.com/events>
- Northeast Organic Farming Association of Vermont Events Calendar: <http://nofavt.org/events>
- DigIn Vermont Events Calendar: <https://www.diginvt.com/events/>
- Agricultural Water Quality Regulations: <http://agriculture.vermont.gov/water-quality/regulations>
- Agency of Ag's Tile Drain Report now available here: <http://agriculture.vermont.gov/tile-drainage>
- VAAFM annual report available here: http://agriculture.vermont.gov/about_us/budgets_reports
- Farm First: Confidential help with personal or work-related issues. More info call: 1-877-493-6216 any-time day or night, or visit: www.farmfirst.org
- Vermont AgrAbility: Free service promoting success in agriculture for people with disabilities and their families. More info call 1-800-639-1522, email: info@vcil.org or visit: www.vcil.org.

For more agricultural events visit our *Funding Opportunities & Resources for Businesses* webpage at: http://agriculture.vermont.gov/producer_partner_resources/funding_opportunities

2022 Farm Show

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online, on social media and in upcoming editions of *Agriview*.

For more information about the 2022 Vermont Farm Show, visit the website: <http://www.vtfarm-show.com/>. For questions, please contact Leslie Pelch, Delaney Meeting and Event Management at leslie@delaneymeetingevent.com or 802-598-0048.

The Vermont Farm Show is produced by the Vermont Farm Show Board of Trustees.

Winter Spreading Ban Starts December 15

The annual winter manure spreading ban begins on Tuesday, December 15 and lasts until April 1 – a full 107 days. This ban on spreading manure or other agricultural waste through the winter months is designed to protect water quality. The Required Agricultural Practices (RAPs) also prohibit manure spreading on frozen and snow-covered ground before December 15th or after April 1st.

Farmers need to ensure that their manure storage is drawn down enough for the duration of the winter spreading ban or that they can stack solid manure in a way that will not lead to water quality impacts. Medium and Large Farm Operations are required by rule to have 180 days of waste storage capacity.

An emergency exemption issued by the Secretary of Agriculture for winter manure spreading during the ban or on frozen or snow-covered ground may be considered for emergency situations, such as structural failure of a waste storage facility. If a farmer anticipates having an issue before or during the ban, please contact Laura DiPietro for assistance with planning winter manure management at (802) 595-1990.

For Immediate Release

The Vermont Agency of Agriculture, Food and Markets have received an application for a Milk Handlers license from the following entity: Agri-Mark, Inc, of Colchester, Vermont to transport cheese products within the State of Vermont. If anyone has germane information as to why or why not this company should or should not be licensed those comments are to be sent to:

The Vermont Agency of Agriculture Food and Markets
Dairy Section Office
116 State Street, Montpelier, VT 05620-2901

All written comments must be received by December 15, 2021.

At that time the Agency will make a determination as to whether a hearing will be held. If we determine that a hearing is necessary and you wish to attend please write to the above address attention Dairy Section.

How Does Efficiency Vermont Help Hemp Farmers?

By Jill O'Connor,
Efficiency Vermont



Processing hemp is energy and resource intensive. Efficiency Vermont and our partners can help save money and energy in this burgeoning Vermont industry. Whether you're just getting started or think you might be able to save energy at your existing farm, it's a great time to reach out to Efficiency Vermont.

The most energy intensive part of hemp processing is drying. When hemp is harvested, it has around 80% moisture content. Dried hemp should be around 10%. That means for one ton of product, or 2,000 lbs, you'll need to remove 1,400 lbs or 168 gallons of water.

How you remove that moisture content matters. The lowest cost, lowest energy method is hanging the product in a barn or laying it on greenhouse benches. While this is ideal from an energy standpoint, it won't work for every business. The drying time will take much longer and it's dependent on ambient conditions that may be out of your control. While it's lower cost, the longer time could increase risks affecting the quality of the product, including mold or contamination from wild animals. If you're looking at mechanical solutions, most farms either opt for heated, forced air or dehumidification systems. Each solution comes with its own pros and cons. The

choice will depend on your production goals, available capacity, and the size of your farm. The UVM Extension Agricultural Engineering Team has a lot more information on different drying techniques and how they might work in your operation.

Where you remove moisture content also matters. If you're trying to dry hemp in a leaky building, you'll end up losing some hot air out of the building. That's wasted energy that you're still paying for. If you're trying to dry hemp in a building that's too humid, the drying process will take longer and use more energy. Efficiency Vermont can help identify fixes to improve the conditions of your drying space. A simple fix like air sealing, particularly around areas where the walls meet the slab and the ceiling, can make a big difference in your energy bills.

Efficiency Vermont can help with every step of the decision-making process, starting with understanding the different available technologies and how they would work on your farm. For large projects, that could include energy modeling to help understand the energy impacts of different choices. If you're deciding between a few different technology solutions, Efficiency Vermont can help complete a cost-benefit analysis to determine what energy solutions will

make the most sense.

Once you've decided on how to move forward, we can help connect you with trade allies to complete your project professionally. Then we can help lower the upfront cost of the project through custom incentives for efficient fans, ENERGY STAR® or commercial-grade dehumidifiers, and heat pump technologies. Our utility partners have incentives available for

projects that reduce greenhouse gas emissions. For instance, if you're replacing a propane-fired system with a heat pump system, they can help offset the upfront cost.

If you're switching to an electric system or starting a new electric-powered operation, you may need to work with your utility to ensure that they can provide adequate power for the site or if you need to upgrade to 3-phase power.

Along the way, Efficiency Vermont's other partners can help make your operation a success. In addition to the UVM Extension NW Crops and Soil Team's deep expertise on growing and production, the Ag Engineering Team can help with postharvest support. The Vermont Agency of Agriculture has additional information on avoiding any health and safety risks related to drying and storage of hemp. And the Vermont Division of Fire Safety can help keep your operation safe by providing information on necessary fire exits, electrical safety, and any additional rules that might apply to your building.

Upcoming Ranking Dates for Vermont NRCS Conservation Programs for Fiscal Year 2022

USDA Natural Resources Conservation Service (NRCS) in Vermont announced fiscal year 2022 assistance opportunities for agricultural producers and private landowners for key programs, such as the Environmental Quality Incentives Program (EQIP), Conservation stewardship Program (CSP), Agricultural Conservation Easement Program (ACEP), Regional Conservation Partnership Program (RCPP) and Agricultural Management Assistance (AMA) program.

While USDA's NRCS accepts applications for these programs year-round, producers and landowners should apply by state-specific, ranking dates to be considered for this year's funding.

In Vermont, this includes:

- December 31, 2021 for EQIP, AMA, and RCPP 2014
- February 11, 2022 for CSP, RCPP 2018, and ACEP

Through conservation programs, NRCS provides technical and financial assistance to help producers and landowners make conservation improvements on their



land that benefit natural resources, build resiliency and contribute to the nation's broader effort to combat the impacts of climate change. "NRCS conservation programs are good for Vermont's natural resources and for your operation's bottom line," said Obediah Racicot, the Vermont NRCS Acting State Conservationist. "Whether this is your first time working with NRCS or you want to take conservation to the next level on your land, we encourage you to contact your local Vermont NRCS field office to learn more."

PRODUCE SAFETY BITE: FOOD SAFETY TIPS FOR FRUIT & VEGETABLE GROWERS

Produce Safety Training Opportunities

By Ollie Cultrara, VT
Agency of Agriculture, Food & Markets

Produce Safety Alliance (PSA) Grower Training helps farmers identify and reduce contamination risks for fruits and vegetables. The interactive training explains how foodborne pathogens can spread on farms, the minimum standards required under the Food Safety Modernization Act (FSMA) Produce Safety Rule, and best practices you can use to reduce potential contamination, all illustrated with on-farm examples. There are plenty of opportunities to learn from other growers and ask questions specific to your operation.

Why attend a training?

Completing the training is required for all farms inspected under the Produce Safety Rule, but that's not the only reason to attend. The PSA Grower Training has value for growers of any scale and stage of farm development and can help you:

- 1. Build a better farm food safety plan** – The Community Accreditation for Produce Safety program recognizes that each farm is unique and expects growers to identify food safety risks within their own operations, but you can't address what you aren't aware of. PSA Grower Training can equip you with the knowledge

and lens to confidently identify and manage food safety risks.

- 2. Foster a culture of food safety on your farm** – Solidifying your produce safety knowledge can help you train your employees on key food safety concepts they need to understand in order to protect the integrity of your product. Even if you've already completed a training, you're sure to deepen your understanding by participating again. Or consider sending an employee and empowering them to take on more food safety responsibilities and lead by example.

- 3. Develop your business** – Attending the training can help you prioritize risks that may be present in your operation. The UVM Extension Produce

Safety and Ag Engineering teams (producesafety@uvm.edu) can help you devise solutions to your top priorities that will benefit both food safety and efficiency.

The Produce Safety Alliance lists upcoming trainings on their website. You can filter courses by a particular state or delivery option: in-person, remote (live via video conference), or online (self-paced over three weeks). Trainings offered by a Northeast state or states with similar growing conditions and practices to Vermont may offer examples that are more relevant than a training offered by states like Florida or California. However, any of the listed courses follow the same core curriculum. Get more information at bit.ly/growertraining.

The Vermont Produce Program and UVM Extension Produce Safety

Team plan to offer a PSA Grower Training for Vermont growers in winter 2022. Let us know if you're interested at ollie.cultrara@

vermont.gov or (802) 461-5128. For more information, visit agriculture.vermont.gov/produceprogram.



Fruit and vegetable growers participate in a Produce Safety Alliance Grower Training in St. Johnsbury, VT

Produce Safety, Orchard Style!

By Tucker Diego, Agricultural Products Manager

Setting out in the dark, produce inspector Tucker Diego begins his early morning drive south to one of the state's largest apple orchards. He strives to get there around the same time picking crews fan out across the orchard to begin the day's harvest. The orchard Tucker visits was selected for a produce safety inspection this year. The purpose of the inspection is to review food safety practices on the farm to ensure apples are safely

grown, harvested, packed, and stored.

Tucker greets the orchard manager as he arrives. After several years visiting the orchard, Tucker knows the manager well. The two head out into the orchard to find the picking crews. An orchard this size has many orchard blocks, each with unique names, spread among the rolling hills. Tucker follows the manager's truck down a dirt road and then up a short, steep hill. They drive through a gate which signals the edge of the orchard. Apple trees reach-

continued on next page

Questions about Precision Technology?

By Sonia Howlett, VT Agency of Agriculture, Food & Markets

Have you made the leap to invest in Precision Ag equipment on your farm? Do you have questions? Have you learned anything you wish to share with other farmers? Alternatively, are you interested in incorporating Precision Ag, but not sure where to start?

Scott Magnan's Custom Services of Saint Albans, VT has recently created a WhatsApp chat group for farmers statewide who own or are interested in Precision Agriculture technology

and want to learn more. WhatsApp is a smartphone text messaging app that can also be used on the computer.

Farmers will primarily be encouraged to share their knowledge and learn from other farmers on this WhatsApp forum, but Scott, UVM Extension and Conservation District staff members, and some others with extensive Precision Ag experience are also on the chat to share their expertise as needed.

Although quite the Precision Ag expert in the state, Scott openly admits that he has more

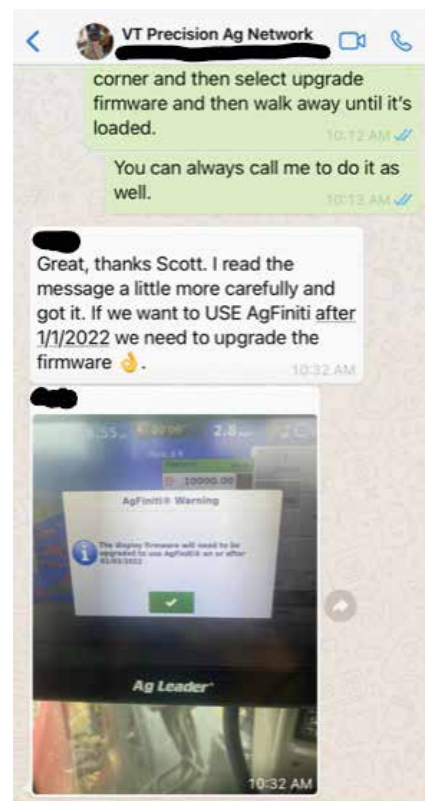
experience with some precision technology brands than others. This farmer-led forum is designed to give farmers the chance to answer questions on a wider range of technologies and to share tips and tricks that have worked for them in their specific experiences which Scott and his team may not have thought of.

Contact Scott at scttmgnn@gmail.com or (802) 363-7707 to join the WhatsApp chat group. Scott and his team are also always available at this phone and email address to teach farmers how to download, interpret, and share the data

from their Precision Agriculture technology.

Precision Agriculture technical assistance from Scott and his team is being provided statewide through a two-year grant from the Vermont Agency of Agriculture, Food and Markets and is free for farms to access.

In a new WhatsApp chat group, farmers can ask questions about Precision Ag to Scott Magnan and other local experts (including fellow farmers)



Produce Safety, Orchard Style!

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ing 20 feet into the crisp air neatly line both sides of the farm road that leads further up and onto the crest of a hill towards a clearing. The clearing is home to a concrete pad with stacked wooden and plastic apple bins ready to receive the day's harvest.

Tucker parks and heads out on foot to find picking crews between rows of Galas, Empires, Macs, and Honeycrisp. He's glad to be wearing waterproof boots that keep his feet dry from the morning dew. When they reach a crew, Tucker checks the cleanliness of the apple bins and picking buckets and observes the crew expertly stripping apples from high-density plantings which are easier to pick standing on the ground.



Any day "out on the road" is a good day in the life of a Food Safety and Consumer Protection Division inspector! Sure beats looking at a computer screen!

In other blocks, crews use metal ladders to climb up into mature trees. They deftly pick "fancy" grade apples for fresh eating into picking buckets strapped around their shoulders. Apples with defects are discarded, and pickers are careful not to bruise apples when unloading picking buckets into the waiting bins. This orchard uses apple jacks (or wagons) which are long narrow trailers towed behind a tractor

with five bins on the back that can be easily loaded and unloaded.

Tucker also checks the condition of the hand-washing and toilet facilities available to pickers in the orchard. The manager shows him where crew members can use restrooms, wash their hands, and take a break back near the concrete pad. Tucker also inspects the farm's irrigation ponds and spray stations for potential

produce safety hazards while in the orchard.

After spending most of the morning in the orchard, Tucker and the manager head back to the packing facility where apples are unloaded, sorted, packed, and stored. Tucker runs through a checklist of topics in his head: ensure birds aren't roosting in rafters above the loading dock; confirm apple coolers are clean; review pest management logs and the location of traps;

verify that workers follow food safety and hygiene practices. Tucker spends a good amount of time watching the apple packing line where bins of apples are submerged into a water "dunk tank", float and roll down a conveyor, and pass through a series

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A typical apple picking bucket used in Vermont's orchards



A newer apple bin on an apple jack ready to accept the day's harvest

VERMONT VEGETABLE AND BERRY NEWS



Compiled by Vern Grubinger,
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Extension
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vernon.grubinger@uvm.edu
www.vvbga.org

Reports From The Field

(Guildhall) We're still harvesting but anticipate finishing by the end of the first week of November. It's been a historic year for us. Highest yielding potato crop we've ever grown by a long measure. Not all the math has been done yet, but we've got about 14,000 cwt into storage already (76 trucks averaging bettering 19,000# a truck). Stand out performers have been Lehigh, Peter Wilcox, and Bel Mondo. Norwis suffered a bit quality wise, but mostly because (I think) the field they were on was 2 years out of 30-year-old hay. Some scab and some wire worm damage.

Our highest yielding area was a 12-acre field of golds that did 470 cwt to the acre,

a yield that'll be a lot of years before we top (unless we irrigate). New varieties to us, NY-149 (gold) & NY-150 (Upstate Abundance) were both unremarkable in yield and tuber size. NY-150 has a chef/foody cult following and I was excited to try it, but I am disappointed to report that it tastes like a small white potato.

Harvest has been mostly smooth, with breakdowns getting turned around quickly, aside from potato trucks, which just get parked. October weather has been unusually good, thank goodness. The main thing slowing us down this harvest season is that we can't speed up unloading trucks in an antique top load barn like ours. It may only take 20 minutes to load the truck, but it will always take at least an hour to unload. And the closer to capacity the barn becomes, the slower the process of jamming spuds into hard-to-reach places.

Another interesting problem is that the yield has been so heavy that our Grimme GB1500 (circa 1989) had trouble digging 2 rows with 2 or 4 rows windrowed on top, there's just too many spuds and the harvester would lose a lot of them off the rear paddles. So, we've direct dug most of the crop, but that hasn't slowed us down much. Our crew is tired (4 people), there have been few days off

or short days this month, but they're pros and brought great attitudes to work every day. All in all, amazing year, hopefully the potatoes store well. If anyone needs NEK grown potatoes for their CSA hit us up.

(Westminster) We've had another 3 to 4 inches of rain since our last report, but most of our crops are in. Several acres of carrots left to harvest, and kale, collards, and radishes still going strong. The wet year really did a number on several crops. This is the earliest we've ever sold out of winter squash, for instance.

The most disturbing long-term issue this year is the amount of galinsoga seed that's going into the seed bank – I don't believe we'll recover from that in my lifetime. The wet weather is one reason: We couldn't cultivate some crops when they got larger. And because of the late frost—and not even a killing frost yet – the galinsoga was able to set seed in some of the sparsely seeded cover crops. But we're seeing, in two fields, one seeded with peas and oats and another with wheat and tillage radish, that the galinsoga was shaded out, in contrast to winter rye cover crop. I think we have been too sparse in our cover crop seeding because we have such a large acreage to cover. But it may be worth it to buy that extra seed, especially the leafy tillage radish, in the future.

The Esch seeder, rented through the Cheshire County (NH) Conservation District, was particularly helpful this year in planting two different varieties of cover crop onto a field.

We finally got our new washing/pack line up and

running. There are still a few bugs to work out, but it will meet food safety protocols as well as cut our packing time in half. A good thing because we have real concerns about long-term availability of labor. Local workers are now practically nonexistent.

(Elmore) We've had the largest most perfect apples ever at our farm this season, with zero inputs. The best fall weather I can ever remember for inventory and fieldwork. Such a gift. Working with the crew to get many fall projects done so spring will be as least overwhelming as possible. Had unusually large crops of kiwiberries and peaches and harvested over 2000 lbs. of plums! Even had a crop of American persimmons on one tree in the high tunnel.

(Burlington) Over the last 30 years our first frost continues to push farther into October, settling in the wee hours of 10/28 this year. In the 1990s, I'd expect our first frost around 10/1, with a late outlier in the 10/8-10/12 range. Now we've had two years running (plus 20 years of incremental creep) of first frost around November 1. Spring hasn't changed in the field much, but autumn sure has shifted later.

Our outdoor season overall was solid, with normal ups and downs among crops. I was reminded this year after a wetter June and July (compared to 2020) that summer rainfall can boost both yields, and diseases, beyond what we achieve with our regular and consistent irrigation. Despite August, September, and October totaling up at similar rainfall to 2020, our mid-September through late fall

harvest has seen much more disease in Alliums, Brassicas and Cucurbits. On the flip side, the cooler weather with regular rainfall improved yields in our potato crop, onion crop, and summer carrot crop markedly over 2020. While irrigation can add water, it can't do much to address heat stress, which may be an even bigger factor in hotter summers.

2021 featured many more field insect troubles than usual with early and ubiquitous infestations of squash bugs, Colorado Potato beetles, Potato Leafhopper, Mexican Bean Beetle, Onion Thrips, Brassica flea beetle, and several different field aphids. Our tunnels were madly afflicted with aphids, though managed to avoid major powdery mildew in tomatoes, despite the higher humidity from our cooler and wetter fall. I hope that this is not a sign of the new normal explained by our shorter, warmer winters.

(Orwell VT) High tunnel summer crops just kept on producing with no frost and balmy daytime temperatures, but house by house, we planted greens for winter sales. Even though it felt we were late getting them in, our timing for harvest should work out well, with most of our salad coming on strong mid-November, and hopefully lasting through March. We experimented using the paper pot system with a tool called a zipper, that opens the soil in one direction, and covers the transplants in the other. We also finally bought a drop seeder that fits the paper pot trays, and it's amazing how much time simple efficiencies save. One effort

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BUSINESS PLANNING
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Email: Agr.agriview@vermont.gov, phone: 802-828-1619. Deadline for submissions is the 1st of each month for next month's issue. Example: January 1st deadline for February issue.

Cattle

Now boarding heifers and beef cattle! If labor's hard to find or you're short on feed, let us board your animals. 300 lbs and up with minimum group size of 50. Fed haylage or mix of haylage and corn silage, your choice. Excellent facilities in a free stall barn with slatted floors, comfort stalls and fans. Rate is \$1.50-2.00 per day per head. References available upon request. Call 802-533-2984. (9)

Good Oak Farm sell out: Certified Organic Ayrshire and Jersey herd for sale. On test and registered. Over 20 very, very good cows either milking or due. Very calm, well-mannered herd raised with kids and other animals. Currently receiving mainly pasture, with very little grain. (802) 234-9588 house phone or (802) 855-3546 - cell ask for Jimmy. (9)

Black Angus heifers and bull calves for sale. Contact 802-558-8196 for more information. (10)

Organic grass-fed Jersey fresh or springing cows or heifers wanted. 802-645-0865 (10)

14 bred Holstein heifers. Call Wayne (802) 285-6383 (11)

Equipment

Boumatic pipeline 80 stalls, 320 ft, 2 inch stainless steel, control box and receiver jar, \$1500.00 or best offer. Please call (802) 868-2285 leave message. (9)

Doda separator for sale: with new screens, excellent shape, used very little, \$20,000 OBRO. Bulk milk tanks for sale: 4000 gallon Boumatic Dari Kool,

excellent condition, \$24,000 OBRO; 1500 gallon DEC, also excellent condition \$8000. Double 10 Boumatic parlor for sale: reel, front exit with ATO and meters; auto ID and sort gate; excellent shape-\$30,000 OBRO. Delaval VMS robots-with ID, computer, 2 air compressors, vacuum pump, 4 sort gates; will need new rubber parts; \$100,000 for all 4 or \$30,000 each. Call 802-533-2984 (9)

WIC 52 feed cart. Used only 11 months. Has TMR beaters and is in excellent condition. \$5200.00 For pics and info call 802 535 4756 or email labmanvt@gmail.com (9)

2001 F350, low miles, setup for Fisher plow, electric brake, runs good. \$3000 Call 948-2774 (9)

Potato planter – Spedo “Baby” Automatic potato planter, new in 2016, 5 acres of use. Great shape, Always under cover. Spedo Potato Digger for 25 hp or less, new in 2016, 5 acres of use. Excellent condition, always under cover. Both pieces can be viewed on video at OESCOinc.com Sold as a pair only \$4600, 20% off price of new. Sprayer – Rears Pak Tank, 100 gallon, boom covers 10 feet, diaphragm pump, high pressure hand-held hose for spraying trees. Excellent condition, rebuilt in 2016 by Orchard Equipment and Supply, less than 10 acres use. Price – \$2400, 20% off purchase price. Charlie Siegchrist - 802-878-2607 or siegchristbarberfarm@gmail.com (10)

Ford L 8000 tandem dump

truck 19ft rack. Hyd dump with tail gate, electric automatic crood tires and body. New batteries 213,000 miles, \$17,500. 802-265-4589 (11)

John Deere Harrows 10ft, 30ft hay elevator good shape, 24ft hay elevator, 2 furrow plows, 3 furrow plows, 285 oliver spreader, 19 ton grain bin, 11 ton grain bin, 7 ft blade also I fix grain bin all over Vermont. 802-624-0143 or 802-895-4683 (11)

Hay, Feed & Forage

Excellent quality first cut wrapped round bales; baleage. Shelburne VT Call Andy 802-598-6060. Analysis available upon request.

Organic haylage 12% protein \$45 per ton, 15% protein \$55 per ton. 802-537-2435

4x4 round balage mixed grains cut late June. \$30 802-325-3707

1st cut 4x5 round bales. Don Pettis, 802-265-4566.

Certified Organic First Cut Wrapped Round Bales for sale. Clover, Timothy and mixed grasses. Test samples and delivery available. Call Matt 802-558-3879.

Vetch & rye seeds for sale, mixed in 50 lb. bags, \$1/lb. certified by Vermont Organic Farmers. Thornhill Farm, 198 Taylor Road, Greensboro Bend, VT 05842, todd@thornhillfarmvermont.com, 802.441.3176

2021 first cut \$4.00 at barn in Ryegate. Steve 802-584-4450.

Hay for sale: 1st cut organic round bales. Randolph Center. Call John at 522-8798

Certified organic first cut wrapped round bales for sale – cut by mid June, good sized and well made. Asking \$50/each with 200 bales available. Beidler Family Farm, Randolph Center Contact: 802-728-5601 or brentbeidler@gmail.com.



Excellent quality first, second, and third cut wrapped round bales for sale. First cut by June 1, dry. \$50.00/bale Please call 802-454-7198.

1st, 2nd & 3rd cut haylage and corn silage for sale at the bunk. Call Peter Gebbie 802-533-2984, leave a message

Dry 2nd Cut Hay For Sale 5' round bales, avg. 750 lbs, \$100/bale- Craftsbury, VT 802-624-0539

Certified organic 4x4 round bales for sale. First cut 45.00, second and third 55.00. 802-793-7526

Excellent quality wrapped round bales for sale. \$50/bale. No emails. Please call 802-454-7198

ADDISON COUNTY

1st cut 4x5 round bales never wet. Good horse & cow hay. 802-948-2627 or 802-558-0166

Certified organic, small square bales always stacked and stored under cover, 35-40lbs/bale. \$4/bale, discounts available for large quantities. 802-989-0781 for inquiries.

Hay for Sale in Addison, VT. Large square bales and small squares. \$50-60 for Large, \$3.50-4.50 for Small. Delivery Available. Call Jack 802-989-8968

Hay for sale. \$3.25 bale. 802-377-5455

1st cut 5ft diameter round bales. \$30-\$35 Orwell 802-

948-2211

Straw for sale - \$7/bale for 50 or more. \$8/bale for less than 50, \$6/bale for all in the barn, approx. 350. from our winter rye harvest in August. certified organic. Thornhill Farm, Greensboro Bend, 05842, todd@thornhillfarmvermont.com, 802.441.3176

Hay for Sale, Cows have been sold. 750 Lb 4X5 round bales stored inside or tube wrapped.

Bedding/Mulch \$35 Heifer/Beef \$40 Dairy \$55 I will load your truck. In Whiting Call 802-623-6584

Large organic round bales good heifer/dry cow hay \$45/bale call 802-948-2382 evenings

BENNINGTON COUNTY

Corn Silage 1000 ton plus. Haylage 500 ton plus. Round bales 4x4. Square bales small. 802-394-2976

CALEDONIA COUNTY

Square baled hay- Top quality, VOF certified organic, generous sized. 1st cut \$4.50/bale, 2nd cut \$5.50/bale at the barn in Barnet. 802-592-3088

CHITTENDEN COUNTY

Round bales for horses. Clean first cut timothy mixed grass, quality net wrapped 4' X 5' bales. Never wet. \$45. each. 802- 879-0391 Westford.

15 large 5x5 round bales mixed grass w/some timothy + clover 800+lbs \$50 ea. call 899-4126

CLASSIFIEDS

FRANKLIN COUNTY

Good Quality Hay 1c & 2c from western US & Canada. Alfalfa orchard & orchard sweet grass 18 to 20% plus protein large bales & organic by trailer loads. Large or small square bales of straw whole or processed at farm we load on direct delivery by trailer load. Mountain View Dairy Farm 802-849-6266

Excellent 2021 1st cut hay wrapped round bales for sale. Call Wayne (802) 285-6383

LAMOILLE COUNTY

Organic baled straw. \$5.50/bale. Organic First Cut Hay. \$5.00/bale. Certified Organic. Valley Dream Farm, Cambridge. 802-644-6598. valleydreamfarm@gmail.com.

ORLEANS COUNTY

Pure alfalfa for sale and also 1st, 2nd and 3rd cut big/small squares, round bales, wrapped or unwrapped, straw and switch grass. Call Richard at 802-323-3275.

Organic Certified Silage for Sale: We will deliver or you can pick up. Call for prices and delivery charge. 1-802-744-2444 or 802-274-4934 or 802-744-6553.

North Troy- Good quality Certified organic large round bales, some dry and some wrapped and 9x200 ft ag bags fo haylage. Also conventional large round bales and 9x200ag bags of haylage. Delivery available 802-988-2959 or 802-274-2832

RUTLAND COUNTY

Good quality 1st and 2nd round bales available, wrapped and dried. Please call 802-446-2435.

WASHINGTON COUNTY

200-4x4 round bales 1st & 2nd cut \$45 each. 802-229-9871

WINDHAM COUNTY

1st cut hay. Good horse hay. \$4.50 bale 802-254-5069

WINDSOR COUNTY

Hay for sale-400 square bales, Reading, Windsor County Vt. \$3.50 per bale at the barn. Call 802-484-7240

4x5 dry round bales \$45.00 delivery available. 802-457-1376

Rolling Meadows Farm: square bales in the field or barn \$4.00. Delivery can be arranged at \$5.50. Very nice

hay from fertilized fields in the South Woodstock and Reading area. Call 802-484-5540 or goodfarmvt@gmail.com. Ask for David.

1st. cut dry round bales for sale. Never been rained on, stored under cover. \$50. @ 1st. cut haylage bales for sale. \$45. Rte. 5 Weathersfield Bow 802 -546-4340.

Dry Round Horse Hay, \$50/ Bale. 200 Bales left. Call 802-356-5030.

Poultry

Young Rhode Island Red laying hens for sales -- Just starting to lay, raised on pasture with continuous fresh grass, clean water and organic grain. Sold for the special price of \$18 each in groups of 5 birds or more. Royalton, VT Call Jinny 802 763 7296 (10)

Sheep

Shetland Sheep for sale: Downsizing our herd so offering this year's ewe and ram lambs, 2 very gentle rams, mature ewes. Colors range from cinnamon to black. Small, hardy sheep with great wool for spinning. We keep ours for pasture improvement and they eat burdock, nettles and thistles. Prices range from \$75 for ram lambs to \$200 for breeding ewes. Call 802-477-2941. (9)

Swine

Four piglets wormed, cut and ironed. Born June 25,2021 Asking \$70.00 each Call 603 2568422

Wanted

Hello! I am moving to Vermont from the UK in September and am looking for housing for myself and my 3-year-old daughter. I will be working as a researcher for UVM Extension on a regenerative agriculture project. We would like to be rural but <40 mins drive from Burlington. We enjoy gardening, foraging, walking, climbing, horse-riding, cooking and generally being outdoors! Budget is \$1500 per month. Please

email me on bryony.sands@bristol.ac.uk if you know of anything suitable! (9)

Wanted: caretaker for "hobby" horse farm in the Upper Valley of Vermont,

Woodstock area. Onsite housing provided. Part time light duties are perfect for retired person or couple. References required. Mail inquiries to wrbfarm1@aol.com (11)

Vegetable & Berry News
continued from page 12

we made to reduce vole and rodent pressure in the tunnels is a clean mow and weed whack around all edges to reduce their cozy winter habitat. We've already lost a fair amount of spinach to nibbling pressure. Now we're moving onto tightening up roll ups, closing end vents, and buttoning up for winter weather!

Put Your VVBGA Soil Health Web Site To Work

Fall is the time to get your soil health records organized! The new VVBGA soil health website will keep soil test results, amendment plans and logs all in one place! Log into <https://vvbga.org/> (same site as CAPs) and click on "soil health". Contact Becky Maden for any questions or assistance at Rebecca.Maden@uvm.edu

Update From UVM Extension Ag Engineering

Andy Chamberlin and Chris Callahan

We have a new video highlighting a DIY starts and germination chamber at Old Road Farm. <https://youtu.be/wUWbZwxyjfo>

A new blog post titled "Building a Better Greens Bubbler" contains

information on design considerations, a wiring diagram, a video overview of building a bubbler, examples from other farmers in the

**Hold The Date:
VVBGA Annual
Meeting
Tuesday Jan. 25, 2022**

Northeast, tips on how to clean a bubbler with downloadable SOP and a link to a recent

SCRUB Webinar on greens bubblers. Visit: <https://go.uvm.edu/bubblers>

Upcoming Events

New England Vegetable and Fruit Conference 2021-Online Light!

December 13-17. <https://nevbga.com/nevfc/>

The program will be a streamlined version of our usual in-person content, with one morning and one afternoon session per day for one week. Tree fruit, small fruit, and vegetables will all be covered, and pesticide and certified crop advisor credits are available. \$50 registration fee gains you full access to the program and a three-month access to the recordings. Session topics include Tillage Reduction Innovations, Climate Adaption Strategies on the Farm, Soil Health, Automation for Small Vegetable Growers, Inspirations from Away, two Berry Crop Sessions and two Tree Fruit Sessions as well as a session on Vegetable Disease and Pest Updates.

Agency Contact Numbers

To help you find the right number for your question, please consult the list below. You are always welcome to call our main line 802-828-2430. We will do our best to route you to person most able to answer your question quickly and accurately.

Program Phone Numbers

Act 250	828-2431
Animal Health	828-2421
Business Development.	828-1619
Dairy	828-2433
Enforcement: Water Quality or Pesticide.	828-2431
Feed, Seed, Fertilizer & Lime.	828-5050
Licensing & Registration	828-2436
Meat Inspection	828-2426
Produce Program	461-5128
Vermont Agriculture & Environmental Lab.	585-6073
Water Quality BMP.	828-3474
Water Quality Grants	622-4098
Water Quality Reports.	272-0323
Weights & Measures	828-2433
Working Lands.	622-4477

VERMONT AGRICULTURE & FOOD SYSTEM PLAN 2021 – 2030:

Hops

Editor's note: This brief is part of the Vermont Agriculture & Food System Plan 2021-2030 submitted to the legislature in January 2021. To read the full plan, please go to <https://agriculture.vermont.gov/document/vermont-agriculture-and-food-system-strategic-plan-2021-2030>

Lead Author: Heather Darby, UVM Extension
Contributing Authors: John Bruce, UVM Extension; Robert Grim, Foam Brewery; Scott Lewins, UVM Extension; Kathleen Norris, Homestead Hops; Mike Noyes, Wicked Bines Farm; Julian Post, Champlain Valley Hops; Samantha Sawyer, Hogback Mountain Brewing

What's At Stake?

There is an opportunity to diversify local agriculture given the large number of Vermont entrepreneurs producing, and consumers purchasing, agricultural products from Vermont. The number of breweries in Vermont has steadily increased to 68 and Vermont ranks first in the United States for breweries per capita (see Beer brief). Vermont breweries utilize more than 300,000 pounds of hops per year, yet Vermont growers produced less than 20,000 pounds of hops in 2019. This could represent a significant opportunity for Vermont hop growers. Hops production in Vermont represents a virtually untapped market to diversify Vermont farms.

Current Conditions

In 1860, the peak of state hops farming, Vermont produced over 640,000 pounds of hop cones. By 1910, hop diseases, movement of production to drier climates, and Prohibition led to extinction of hops from Vermont's agricultural landscape. The short growing seasons, moist climate, and pest and disease pressure still make it challenging to grow hops in Vermont compared to more favorable growing conditions in other regions of the world. Adding this to the incredibly high capital investments needed to grow on a commercial scale means hops grown in Vermont can be three times more expensive than hops grown in larger, more well-established hops regions, such as the Pacific Northwest. This results in additional challenges for Vermont farmers to maintain a competitive edge against lower pricing from dominant, large-scale hop-producing regions. Despite these challenges, hops are making a comeback due to recent innovations in hop production, local food movement interests, and applied research.

When craft breweries were first gaining a foothold in Vermont, there was essentially no local hops production, so brewers' business models were built on importing hops. The relatively higher volume and lower cost of these imported raw materials has made



it difficult to incorporate the newly available locally grown hops into the brewers' production.

Additional success in breeding programs for hops across the globe has also led to highly desirable proprietary hop varieties with unique characteristics and flavor profiles offered to brewers, which can make it additionally difficult for our regional growers to compete. However, many newer breweries are building their business models to account for higher input costs, and are determined to source ingredients locally.

Bottlenecks & Gaps

- Potential up-front infrastructure costs of \$13,000/acre, in addition to specialized harvesting and drying equipment requirements and limited examples of successful regional producers, cause farmers to doubt that hops can be a viable agricultural enterprise.
- Growers need support services for plant nutrition, irrigation, pest control, and other cultural management practices, however, the only group

focused on creating new knowledge is UVM Extension, with limited grant-based funding for personnel with other duties.

- There is not enough regional or local processing capacity.
- Supply of local hops doesn't meet the current needs of local brewers primarily because of cost, inconsistent supply, and lack of desirable varieties, and there is currently no statewide group working in Vermont to advance local hops and other brewing ingredients with brewers or consumers.
- There is a lack of sensory evaluation and related information on the terroir and unique aromatic properties of hops grown in Vermont.

Opportunities

- The quality and format (pelletized hops) were past concerns of brewers but may no longer be an issue for locally produced hops as brewers continue to adapt.
- Vermont hops likely have a unique terroir that could be used to develop specialty brews.
- Some Vermont hops producers have built effective relationships with brewers, and helped the brewers convey the importance of local ingredients to consumers.
- There is a perception among consumers that Vermont craft beer is high-quality and unique; when Vermont craft beer

includes Vermont ingredients the beer is perceived as even higher-value.

- Understanding terroir helps brewers tell a more compelling story, which increases value to consumers.

Recommendations

- Increase and permanently fund technical assistance services through UVM Extension, Vermont Agency of Agriculture, Food and Markets, or other stakeholder organizations. The focus should include plant nutrition, irrigation, disease, pest, and weed management, as well as economics and marketing expertise to help differentiate Vermont hops from other hop sources. An additional one FTE would be appropriate to cover all aspects. Cost: \$125,000 for 1 FTE.
- Develop sensory profiles to capture the terroir of Vermont hops and increase market appeal and value to local brewers.
- Incentivize brewers to produce beer with higher quantities of local hops through branding opportunities, or statewide incentives to purchase beer produced with local ingredients.
- Provide assistance with building relationships between Vermont hop yards and brewers, and increasing the visibility of local hops with consumers, to build demand for locally grown hops.

Successful and Sweet Maple 100

By Julia Scheier, VT Agency of Agriculture, Food & Markets

The Agency of Agriculture, Food & Markets extends a heartfelt thank you to all who participated in this year's Maple 100! Whether you were a business offering a creative maple treat or someone scouting the state for the best maple creemee, we hope everyone found new ways to enjoy maple this foliage season.

The Maple 100 brought new and returning customers to businesses across the state. One business reported "we had a tremendous turn out. Most of our out of state visitors saw our place on [the Maple 100] page." Another noted that they "had a wonderful group of new guests... having heard we made products from

maple and [were] excited to taste and explore... we referred guests to local sugarers and they referred them back." Another used the Maple 100 as a "reason to rework [their] showroom educational display" to talk about Vermont wood and forests and felt the benefits will be a part of "how we tell our story from now on." Businesses also provided actionable feedback on various ways to improve the event in 2022. The Agency looks forward to compiling this information and working with our marketing team to expand the Vermont Maple 100 in the future.

Preliminary data shows over 140 online ads and posts were viewed over 1 million times by more than 600,000 users. VTmaple100.com received more than 4,000 page views from over 3,400 users in all 50 states

and various countries. This marketing push by The Agency of Agriculture, The Department of Tourism and Marketing, and statewide partners included a new promotional effort via an Over The Top (OTT) Advertising campaign.

These customized, digital streaming ads reached more than 50,000 users in the Albany-Capital region and Springfield-Holyoke markets. Local media coverage from the two leading outlets in the state, WCAX and WPTZ, also brought traffic

and awareness to Vermont Maple 100. We look forward to strengthening and expanding next year's Maple 100 — in the meantime, be sure to check out your favorite local store for a delicious maple treat!

Upcoming Grant Opportunities

The Agency of Agriculture, Food & Markets is pleased to be able to help you identify upcoming grant opportunities. Please go to <https://agriculture.vermont.gov/grants/calendar> for more information.

Programs Open Year-Round

Farmstead Best Management Practices (BMP) Program

Technical and financial assistance for engineered conservation practices on Vermont farms.

Jenn LaValley
Jenn.LaValley@vermont.gov
(802) 828-2431

Pasture And Surface Water Fencing (PSWF) Program

Technical and financial assistance for pasture management and livestock exclusion from surface water on Vermont farms.

Kaitlin Hayes
Kaitlin.Hayes@vermont.gov
(802) 622-4112

Grassed Waterway and Filter Strip (GWFS) Program

Technical and financial assistance for implementing buffers and seeding down critical areas on VT farms.

Sonia Howlett
Sonia.Howlett@vermont.gov
(802) 522-4655

Conservation Reserve Enhancement Program (CREP)

Implementation costs of vegetated buffers and rental payments for maintained buffers on Vermont

agricultural land.

Ben Gabos
Ben.Gabos@Vermont.gov
(802) 461-3814

Phil Wilson
Phillip.Wilson@vermont.gov
(802) 505-5378

January

Community Supported Agriculture Grant

Reimbursement for 80% of the cost of community supported agriculture shares for early childcare providers.

Trevor Lowell
Trevor.Lowell@vermont.gov
(802) 585-9186

Specialty Crop Block Grant Program

Grants for collaborative projects to benefit multiple fruit, vegetable, honey, maple, hops, Christmas tree, or nursery crop producers or organizations

Gina Clithero
AGR.SpecialtyCrops@vermont.gov
(802) 585-6225

February

Conservation Reserve Enhancement Program (CREP)

Implementation costs of vegetated buffers and rental payments for maintained buffers on Vermont agricultural land.

Ben Gabos
Ben.Gabos@Vermont.gov
(802) 461-3814

Phil Wilson
Phillip.Wilson@vermont.gov
(802) 505-5378

For Immediate Release

The Vermont Agency of Agriculture, Food and Markets have received an application for a Milk Handlers license from the following entity: Choiniere Family Farm, of Highgate Center, Vermont to process, package, buy and sell, and transport cultured products within the State of Vermont. If anyone has germane information as to why or why not this company should or should not be licensed those comments are to be sent to:

The Vermont Agency of Agriculture Food and Markets
Dairy Section Office
116 State Street, Montpelier, VT 05620-2901

All written comments must be received by December 15, 2021.

At that time the Agency will make a determination as to whether a hearing will be held. If we determine that a hearing is necessary and you wish to attend please write to the above address attention Dairy Section.

Chris Herrick Appointed as Department of Fish & Wildlife Commissioner

Governor Phil Scott announced the appointment of Chris Herrick as the commissioner of the Department of Fish and Wildlife. Herrick will lead the department responsible for the management and conservation of fish, wildlife and their habitats.

For the last five years, Chris has served as deputy commissioner at the Department of Public Safety (DPS) and prior to that he served two and a half years as director of Vermont Emergency Management within DPS.

"Chris has demonstrated strong leadership within state government, including through the pandemic, and

has a wealth of knowledge that will benefit the Department," said Governor Phil Scott. "He will serve the state well in this new role and contribute to our already successful, science-based management and conservation of wildlife, land and waters."

As deputy commissioner, Herrick has been responsible for many aspects of DPS operations and management and has played a significant role in policy development and legislative affairs. Additionally, over the last 20 months, Herrick has been responsible for the



Chris Herrick

coordination and deployment of COVID-19 testing supplies, the development and decommissioning of the MEDSURGE sites, and has served as an incident manager

for the State Emergency Operations Center.

"Chris will be a great addition to the Agency's leadership team and the important work of stewarding Vermont's natural resources for the benefit of all Vermonters," said Agency of Natural Resources Secretary

Julie Moore. "As an avid outdoorsman, I look forward to Chris bringing together his personal interests with his knowledge of state government and clear commitment to state service."

Herrick has worked for DPS for 22 years in multiple roles and with increasing responsibility. Notably, he served as the first chief of the HAZMAT Team in 1999, which was created to work with fire chiefs before, during and after hazardous material events in their communities. Herrick's community service includes 30 years as a volunteer firefighter with five years as Chief of South Hero

Volunteer Fire Department, a certified EMT for 25 years, and he has served as chair for both the select board and school board. He completed his undergraduate at St. Michaels College and earned his master's degree from the University of Vermont. In his free time, he enjoys outdoor activities, ranging from kayaking to fly fishing, hunting, mountain biking, skiing, snowshoeing and hiking with his dog Lucy.

Herrick will start his new role November 8, replacing Louis Porter who previously announced he would step down at the end of October.

Subscribe to Field Notes!

A quarterly newsletter from the Vermont Agency of Agriculture, Food & Markets' Food Safety and Consumer Protection Division

If you eat food or purchase commodities at retail in Vermont, you will benefit from quarterly updates from the Agency's Food Safety and Consumer Protection Division, comprising the Dairy, Animal Health, Meat Inspection, Weights and Measures, and Agricultural Products Sections. Get a glimpse into how this specialized team ensures safe food and fair markets for all Vermonters! To subscribe, visit here: <https://vermont.us7.list-manage.com/subscribe?u=7858fdf10d2a4e7ed78a12245&id=6612b3a6ff>

Vermont Farm Bureau is a grassroots not-for-profit membership organization dedicated to supporting Vermont farm families, agriculture and forestry.

We advocate for public policies that strengthen and grow our agricultural economy and conserve our natural resources.

www.vtfb.org



Produce Safety, Orchard Style!

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of inspection points before being hand-packed into retail bags. He uses a chlorine test strip to check chlorine levels in the dunk tank and reviews equipment sanitation records. Tucker thoroughly inspects equipment to make sure it is clean and in good repair and inspects the coolers where apples are stored in stacked bins for many months in atmosphere-controlled rooms where oxygen is reduced to around 1%.

By the afternoon, Tucker is busy wrapping up the inspection, reviewing any critical findings with the manager, and completing the inspection form which he leaves with the orchard. Often, he shares produce safety factsheets to help orchard managers find water testing labs or to provide

guidance on particular issues like sanitizer recommendations and food safety best practices. Tucker ends the day driving back north, day-

dreaming about cider donuts, knowing he'll be doing it again soon at another orchard in another corner of the state.

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Christmas Trees

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with extreme dryness in early summer. Newly planted trees struggled; less so for more mature trees. 2021 has been a different story, with plenty of rainfall through much of the region. As a result, there should be a good supply of trees if you want to visit a farm and cut your own, and the quality should be excellent.

There are reports of a shortage of trees in 2021 throughout the country. Production of Christmas trees can be cyclical, much like corn, soybeans, and other agricultural crops, as farmers adjust their plantings to marketing and pricing outlooks. Unlike annual crops, though, the cycle is 8-10 years rather than an annual one as is the case with many other crops. Availability of trees in 2021 has much to do with a farmers outlook several years ago. There is no denying that supply of wholesale trees will be tight this year. Most Vermont farmers who sell to the wholesale market are sold out for the year, and at favorable prices.

While supply and demand cycles will always be part

of agricultural decision making, the future of the Christmas tree industry is a good one. Farmers who are looking at diversification, with good land and with the capability of absorbing annual production costs and waiting several years before trees reach merchantable size may want to give this some thought.

The New Hampshire-Vermont Christmas Tree Association

was founded in 1956 and represents both large and small, wholesale and cut your own growers throughout the two-state region. For further information they may be reached at info@nh-vtchristmastree.org or by visiting their web site: www.nh-vtchristmastree.org. Jim Horst is the owner of Mount Anthony Tree Farms in North Pownal, Vermont. Visit their website at <https://www.mtanthonytreefarms.com/>

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